

REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed December 22, 2008.

In the Office Action, the Examiner rejected claims 19-27 under 35 U.S.C. § 101 and claims 1-36 under 35 U.S.C. § 102.

Applicant has amended independent claims 1, 10, 19 and 28 to further clarify embodiments of the invention.

Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Rejection Under 35 U.S.C. § 101

Claims 19-27 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter.

Applicant has amended claims 19-27 such that they recite a machine-readable medium of a storage device having tangibly stored thereon instructions...to address the Examiner's rejection.

Applicant respectfully submits that this amendment overcomes the Examiner's 35 U.S.C. § 101 rejection and respectfully requests the Examiner remove this ground for rejection.

Rejection Under 35 U.S.C. § 102

Claims 1-36 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,496,847 issued to Bugnion et al. (hereinafter Bugnion).

MPEP § 2131 provides:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ... "The *identical invention* must be shown in as complete detail as contained in the ... claim." (Emphasis added). *Richardson v.*

Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).
The elements must be arranged as required by the claim.

Applicant respectfully submits that amended independent claims 1, 10, 19 and 28 are not anticipated by Bugnion because Bugnion does not describe or suggest the elements set forth in Applicant's amended independent claims.

In particular, looking at amended independent claim 1, amended independent claim 1 recites: a processor having a normal execution mode and a host execution mode...a virtual machine monitor (VMM) operable in conjunction with the host execution mode to create at least one protected mode environment to operate guest software in a virtual machine...wherein responsive to a command to switch between protected modes, the VMM causes the processor to *atomically switch between an original protected mode environment and a target protected mode environment...and...a virtual machine control structure (VMCS) to store state information for use in switching between the original protected mode environment and the target protected mode environment...*

In the previous Office Action, the Examiner relied upon column 12, lines 53-57 as being allegedly relevant to a virtual machine control structure (VMCS) to store state information for use in switching between an original protected mode environment and a target protected mode environment.

In actuality, column 4, lines 52-61 states that:

In the preferred embodiment of the invention, a driver is downloaded into and is resident in the host operating system. A host operating system (HOS) context is then saved in the driver. A corresponding virtual machine monitor (VMM) context is saved in the virtual machine monitor. Switching from the HOS context to the VMM context is then carried out in the driver, whereas switching from the VMM context to the HOS context is done in the virtual machine monitor. The driver issues, in the HOS context, commands previously specified by the VMM. (Bugnion, column 4, lines 52-61, emphasis added).

As set forth above, this section of Bugnion relates to a driver that is downloaded and is resident in the host operating system and a corresponding VMM context that is saved in the

virtual machine monitor. Further, switching operations in Bugnion relate to switching from the HOS context to the VMM context in a driver and switching from the VMM context to the HOS context in the VMM.

Thus, Bugnion relates to switching operations that occur between a host operating system (HOS) and a virtual machine monitor (VMM).

There is no description or suggestion of a *virtual machine control structure (VMCS)* to store state information for use in switching between *an original protected mode environment and a target protected mode environment*.

More particularly, Bugnion relates to: “A driver that is downloadable into the HOS at system level forms a total context switch between the VMM and the HOS contexts...A user-level emulator accepts commands from the VMM via the system-level driver and processes these commands as remote procedural calls...The emulator is able to issue host operating system calls and thereby access the physical system devices via the host operating system...The host operating system itself thus handles execution of certain VMM instructions, such as accessing physical devices.” (Bugnion, Abstract, emphasis added).

Thus it is clear that Bugnion relates to the HOS handling execution of VMM instructions.

Accordingly, Bugnion does not teach or suggest a VMM to create a protected mode environment to operate guest software in a virtual machine wherein responsive to a command to switch between protected modes, *the VMM causes the processor to atomically switch between and an original protected mode environment and a target protected mode environment*.

Switching operations that are performed in Bugnion occur between the HOS 340 and the VMM 360. (Bugnion, column 11, lines 29-33). Bugnion describes switching operations that occur between the HOS 340 and the VMM 360 and does not teach or suggest a VMM that causes a processor to atomically switch between an originally protected mode environment and a targeted protected mode environment.

Moreover, Bugnion does not describe or suggest *a virtual machine control structure* to store state information for use in *switching* between *an original protected mode environment* and *a target protected mode environment*.

Bugnion is merely related to a host operating system (HOS) that handles execution of certain VMM instructions.

Because Bugnion does not describe or suggest the elements of Applicant's amended independent claims 1, 10, 19 and 28, Applicant respectfully submits that these amended independent claims, and the claims that depend therefrom, are not anticipated or rendered obvious by Bugnion.

Applicant respectfully requests that the Examiner allow these claims and pass them to issuance.

Conclusion

In view of the remarks made above, it is respectfully submitted that pending claims 1, 2, 4-11, 13-20, 22-29, and 31-36 are allowable over the prior art of record. Thus, Applicant respectfully submits that all the pending claims are in condition for allowance, and such action is earnestly solicited at the earliest possible date. The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application. To the extent necessary, a petition for an extension of time under 37 C.F.R. is hereby made. Please charge any shortage in fees in connection with the filing of this paper, including extension of time fees, to Deposit Account 02-2666 and please credit any excess fees to such account.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 4/22/2009

By


Eric T. King

Reg. No. 44,188

Tel.: (714) 557-3800 (Pacific Coast)

Attachments

1279 Oakmead Parkway,
Sunnyvale, CA 94085-4040